

[Home](#) | [Entertainment](#)
[News](#) | [Obituaries](#)
[Sports](#) | [Marketplace](#)
[Business](#) | [Site Map](#)
[Classifieds](#) | [Weather](#)



The Advocate **ONLINE**

[Back to Index](#)

Published on 6/26/01

[E-mail this story to a friend](#)

Project 'plugging' grass into Chandeleur Islands

By [MIKE DUNNE](#)
Advocate staff writer

CHANDELEUR ISLANDS -- With assembly-line efficiency, workers drilled a hole, tossed in a cube of fertilizer, plopped down a plug of marsh grass and covered the roots.

They are jump-starting Mother Nature in an effort to heal this chain of islands, east of St. Bernard Parish and south of the Mississippi Gulf Coast, ravaged in 1998 by Hurricane Georges.

The \$389,000 smooth cordgrass planting project is designed to mimic how the island chain healed itself more than three decades ago when Hurricane Camille tore up the islands in 1969.

The Chandeleur Islands are a key fish habitat and separate the muddy Chandeleur and Breton sounds from the open Gulf of Mexico.

University of New Orleans researcher Shea Penland, who helped design the project, said the platforms revegetated naturally about 10 years after Camille, helping to stabilize the islands until Georges' came along.

He and others pushed the idea of planting grasses to speed up the natural process and more quickly stabilize the island chain, which is also a National Wildlife Refuge.

The Chandeleurs are the remnant of a former Mississippi River delta.

About 2,000 years ago, the Mississippi River emptied into the Gulf of Mexico through St. Bernard Parish.

The river delta shifted to Bayou Lafourche, then switched to its current "birdfoot" delta about 800 years ago.



Advocate staff photo by Arthur D. Lauck

More than 80,000 smooth cordgrass plants are being planted on the back side of the Chandeleur Island chain to help stop the loss of land after the islands were damaged by Hurricane Georges in 1998.

As the old delta degraded and subsided, it left behind a sandy arc of islands that are fundamental nurseries for fish and other sealife, said Erik Zobrist of the National Marine Fisheries Service.

The Louisiana wetlands are the birthplace of a billion-dollar fishery, he said.

To help rebuild the islands, the Coastal Wetlands Planning, Protection and Restoration Act program authorized spending money to plant about 81,000 plugs of marsh grass on the "overwash fans," or splays of sand in the shallow water behind the island.

The fans were the result of the hurricane's storm surge pushing back the island, said Keith Lovell, a project manager for the Louisiana Department of Natural Resources.

DNR is co-sponsor on the project with the fisheries service.

Lovell said Georges washed away about one-third of the island chain's land, which is about 22 miles long.

"The marshes were stripped of a lot of vegetation" and the planting project will allow the sand to build up and reconstruct the island, Lovell said.

Cuts in the island are already beginning to fill in.

The fisheries service project supervisor, Rachel Sweeney, said the island is naturally moving toward land over time.

The overwash fans "form platforms for the island to retreat."

Without the platforms, the sand "rolls back into deeper water and the island is lost."

Twenty percent to 25 percent of the sand would be washed off the island platforms and lost if the island is not planted in 10 years, Sweeney said.

About 6.6 miles of shoreline will be planted by the project, Sweeney said.

Last year, three test plantings were done to determine the optimum plant size and depth of water.

"We didn't know because no one has ever tried this," she said.

One of those test plots provides visible proof today that smooth cordgrass thrives at the average water line, the point between high tide and low tide.

An arc of high tide plantings still shows, but pales in comparison to the thick, solid strip of grass 6 to 10 feet wide that has spread from a planting done every 5 feet one year ago.

The low-tide plants are also visible but not doing as well.

"We knew smooth cordgrass likes to be wet some of the time and dry some of the time," Sweeney said. Most of the grass is being planted in water 4 to 10 inches deep.

The plantings are done on the mean water line as laid out by crews from the University of New Orleans. The typical planting will place eight more rows 10 feet apart on the high side and two rows on the low side.

As his crew planted grass, Mitch Pitre of Mitch's Landscaping of Larose looked over the rootball of one plug being used and pointed to new shoots beginning to form which will become new plants.

Smooth cordgrass propagates from roots rather than seed, he said. Pitre grew the plants in greenhouses near Larose beginning in January.

"We wait for the tide to go out. ... We can walk better and see better," Pitre said.

Mitch's Landscaping formed a joint venture with Bertucci Construction of Jefferson Parish to do the unique job.

Bertucci President Tony Zelenka said, "This place is isolated and remote" and presents a lot of logistical problems. All the plants, materials, manpower and supplies are being ferried by boat 38 miles from the Gulfport Marina, he said.

The biggest problem was having to demobilize when Tropical Storm Allison flared up and hung around, Zelenka said.

Plantings had begun when Allison gave an unplanned opportunity to see how the project would fair in a storm.

Sweeney said she returned after the storm and could tell the plantings had been flooded by at least 18 inches of water.

She saw no or little plant loss, she said. Lovell also said there was little plant loss.

The project will be monitored intensively in the next 90 days and for the next five years to see how well the idea works, Sweeney said.

[Top of page](#)
